

saxon



**1.25" Laser Collimator with 2" Adapter
Instruction Manual**

SKU# 651002

Saxon 1.25" Laser Collimator with 2" Adapter Features

Quickly and conveniently collimate your telescope with the saxon Laser Collimator! Promising precise alignment of your telescope, this aluminium laser collimator has a bulls-eye target that allows you to easily adjust the telescope's primary mirror by tweaking the adjustment screws. Collimation is successful once the laser beam hits the bulls-eye.

The saxon Laser Collimator is powered by 1 x CR2032 lithium battery (included).



WARNING!

- Do not look directly into the laser beam, permanent eye damage may result.
- Avoid exposure to skin and sensitive materials which might cause burn skin and materials.
- Never aim any laser towards an aircraft or moving vehicle. This is unsafe and is illegal, you could be arrested and jailed.
- This is not a toy. Children should never be permitted to use the laser collimator.

How to Align Your Newtonian Telescope?

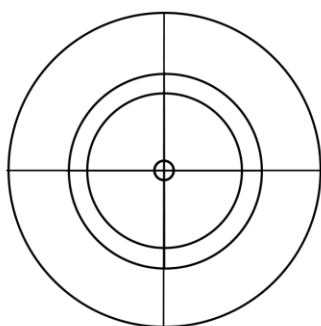
Saxon telescopes are aligned at the factory, but shipping and handling can sometimes misalign collimation. Misaligned collimation can mean dimmer and blurrier images when you observe through the telescope. Simply follow the below instruction to perform a collimation to your telescope.

1. Remove the dust cap of your telescope.
2. Remove the eyepiece or focuser draw tube dust cap from the telescope.
3. Insert the laser collimator into the eyepiece holder. Orient the bulls-eye on the side of the collimator so that it is pointing towards the primary of the mirror. Tighten the collimator in place using the eyepiece holder thumb screw.
4. Stand at the side of the telescope and check out the primary mirror and look for the laser pinpoint.
5. Adjust one, two or all three tilt screws on the secondary mirror holder until the laser pinpoint is in the centre of the "washer". **Note that do not over tighten the tilt screws that may cause damage to the screws.**
6. Go to the primary mirror end and look at the laser collimator. Adjust one, two or all three collimation screws, until the pinpoint is centre on the bulls-eye. **Note that you may need to loosen one or all three of the locking screws to tighten or loosen the collimation screws.**
7. Return to the secondary mirror holder and readjust the tilt screws if necessary.

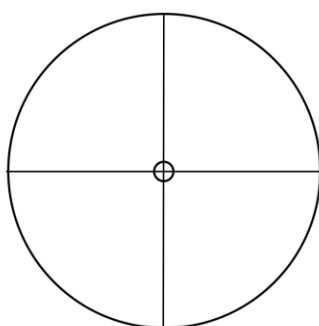
Ever Heard of the Barlowed Laser Collimation?

A barlowed laser collimation does exactly what the Cheshire collimator does, but with added the benefit of being convenient to use at night. This technique was invented by Nils Olof Carlin in Ystad Sweden and published in the 2003 issue of Sky and Telescope magazine. To perform a barlowed laser collimation, you are required to use the below equipment:

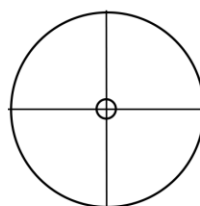
1. A saxon laser collimator (SKU#651002)
2. A saxon 1.25" 2x short-focus barlow lens (SKU#530002)
3. A pair of scissors.
4. Cut out the below round reticle that fit with your barlow lens.



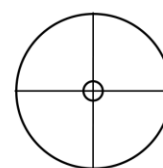
Combine of 1 inch
1.25 inch & 2 inches



50.8mm diameter
or 2 inches

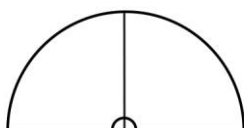


31.75mm diameter
or 1.25 inch

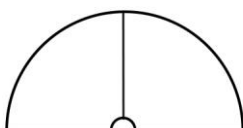


25.4mm diameter
or 1 inch

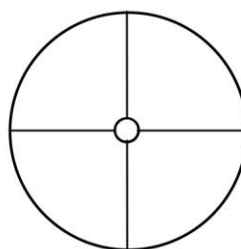
5. Fold the round reticle into half and cut off the small circle in the middle. This will allow the laser beam to pass through.



Folded into half



**Small circle in the middle
has been cut off**

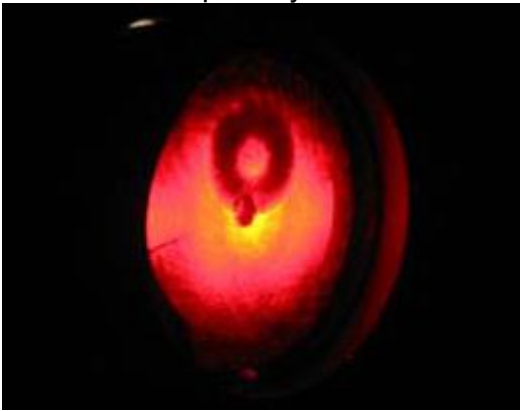


**Unfolded round reticle
with middle circle cut off**

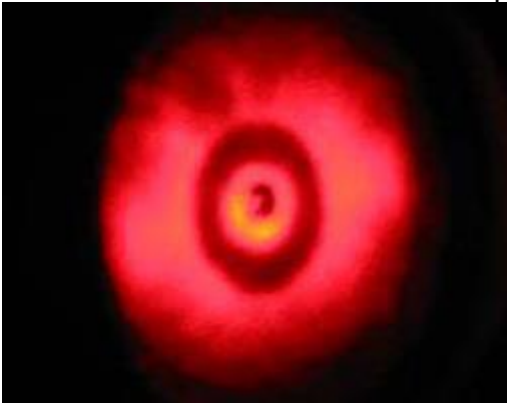
Getting started!

You are ready once you have the earlier mentioned equipment. Simply follow the below instruction to perform a barlowed laser collimation to your telescope.

1. Remove the dust cap of your telescope.
2. Remove the eyepiece or focuser draw tube dust cap from the telescope.
3. Insert the barlow lens into the eyepiece holder. Tighten the barlow in place using the eyepiece holder thumb screw.
4. Insert the cut out round reticle into the barlow lens.
5. Insert the laser collimator into the barlow lens. Tighten the laser collimator in place using the barlow lens holder thumb screw.
6. Turn on the laser collimator, the barlow will spread out the laser beam and reflects the shadow of the primary “washer” to the cut out round reticle. As per below image:



7. Adjust the primary mirror until the shadow of the “washer” is around the output hole on the laser of the cut out round reticle. As per below image:



Tip: You can perform this collimation technique at night so it is easier to see the shadow

What's included in the box

1x Saxon 1.25" laser collimator
1x 2" to 1.25" adapter
1x CR2032 lithium battery
1x instruction manual

You can also obtain the e-Manual from our website at

www.saxon.com.au

We recommend the following accessories for your collimator

Saxon 1.25" 2x Short-Focus Barlow Lens/ SKU#530002



Ever in a position where the strongest eyepiece you had just wasn't strong enough and wish there was a zoom button or had a stronger eyepiece handy? You will find a Barlow lens in almost any astronomers' accessory box. This **Saxon 2x Achromatic Barlow Lens** is a great accessory to have handy with your telescope.

Saxon 1.25" Cheshire Collimator Eyepiece/ SKU#651001



Your telescope will always be properly and precisely aligned with the use of the saxon 1.25" Cheshire collimator eyepiece! The Cheshire collimator eyepiece has a peephole opening on one end of the tube and thin crosshairs at the opposing end.

Alignment is easy as the 45 degree internal surface projects light into optical path to facilitate primary mirror alignment. To start aligning your optics, simply insert the Cheshire collimator eyepiece in the focuser and follow the alignment instructions.

Saxon 1.25" Colour Planetary Filter Set/ SKU#643905



The **saxon 1.25" Colour Planetary Filter Set** is a great addition for lunar and planetary observing. They help increase image contrast and resolution on the Moon and planets as well as reduce glare from the full or near-full Moon.

The set comes in four colours of Yellow (#12), Red (#23A), Neutral Density (#25) and Blue (#80A).

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